



Virtual Beef

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What the Public Sees

Nancy Noecker, Beef Cow-Calf Specialist, OMAF and MRA

Do you ever think about what the public sees of the beef industry? Or what they think of the beef industry? Not a week goes by that some story on Animal Welfare, or rather the lack of good welfare is in the papers or news. We have been lucky in agriculture - especially in the grazing culture - to have a consuming public that generally trusts farmers. However every bad news story erodes that trust a little more.

That is why we should challenge ourselves to sit back and try to see our industry as the public would.

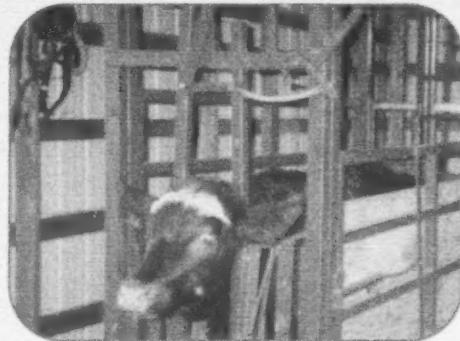
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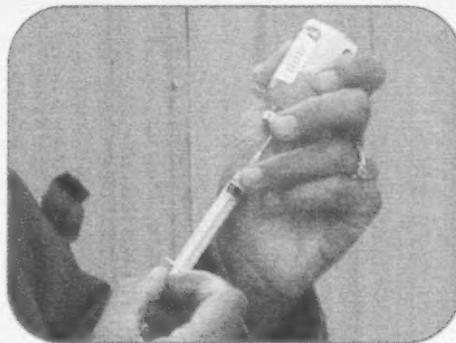


First thing what they don't see much of is the "happy" cows and calves out on pasture. That is usually in a back field somewhere. Where the public does see our animals is when they are in transport on the road, and this often isn't the best picture. We have all heard panic bawling calves on a truck stopped at a stop light. This will raise the level of anxiety in our consumers as well as in the calf. In fact, this is the number one issue that consumers write to the Minister of Agriculture and Food about.

The next spot consumers may see cattle is at an auction mart. Again, not usually a pretty picture and one we have become very barn-blind to as we load, unload and move cattle through a facility. We hit cattle that are already moving, and electric prod use is still pretty prevalent. We need to try and step back to see it as a consumer would; or better yet, get a non-farming neighbour to go with you and ask them what they think. Most changes are not that big a deal but more about being aware of what we are doing and learning to watch and interpret an animal's reactions.



At this point, many producers will comment that why do they care what some naïve member of the public (with no farm animal experience) thinks. The "why" is because we want them to continue to see beef as a desirable protein choice. That is why our Beef Code of Practice will be very important to the industry and why we need to become aware of what is in it, and practice it. It will become our contract with the public as to how we raise beef when they can't see what is going on. Look for the final copy to be out this fall.



If we don't, we will continue to lose market share as consumers move to more branded products and demand "humane" attributes that may or may not benefit the animals. Some production systems will turn this to their advantage by producing beef raised under various protocols, and charge accordingly.

The good news is that although farmers use different words than the public they have a very balanced view of animal welfare that fits well with public views. This was found in a survey run by Dr. David Fraser of the Animal Welfare Program at the University of British Columbia. We need to tell the good news story about how cows and calves are run and how beef is produced. We need to explain procedures we do such as castration, dehorning and vaccinations and the reason why we do it. If we can't explain them, then we need to take another look at it ourselves and question why we do them.

Even in the final slaughter of cattle consumers are very accepting if we don't try to hide things or spin the information, but just present it in a very open manner. The American Meat Institute recently followed that advice by creating a Video Tour of a Beef Plant Featuring Dr. Temple Grandin – find it on YouTube .

Animal Welfare and our codes of practice can be a future opportunity for enhanced marketing of a well raised product. We just need to step back and see it as the public sees it!

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Grazing Legumes and Managing Bloat

Jack Kyle, Grazier Specialist, OMAF and MRA

Legumes are some of our most productive pasture species. Alfalfa is the main hay legume used in Ontario because of its productivity, feed quality and tolerance of dry weather. However, producers who value alfalfa for stored forage are often hesitant to graze it because of the risk of bloat.

The gains on an alfalfa based pasture can approach 3.0 pounds per day. Gains of this magnitude bring pasturing to a whole new level! But symptoms of frothy bloat can appear very quickly. The consequences are often fatal, unless treated quickly. The good news? The management tools are available to reduce the bloat risk to almost zero.

There are a number of steps to attaining the positive results of grazing alfalfa and clovers:

1. Graze when the legumes are in flower or close to flowering
2. Move cattle to new pasture after the morning dew has dried. Wet legumes are more prone to causing bloat.
3. Ensure cattle are not hungry so that they don't consume a large quantity of legume at any one time.
4. Offer fresh pasture to livestock every 1-2 days and in a quantity that they consume both the leaves and stems, not just eating top leaves.
5. There are excellent products available that are very effective at controlling bloat. The key is providing a daily dose for each and every animal.
 - Bloat Guard is a dry product that can be fed with a small amount of grain to act as the carrier. Bloat guard is available through feed dealers.
 - Alfasure is a liquid product that is administered through the water system. As with the dry product, a daily dose is critical to keep the animals bloat free. Alfasure is available through veterinarians. Both of these products will allow you to achieve the higher gains and increased productivity that legumes offer, without the fear of bloat.

The growth curve of grass based pastures provides abundant pasture in May and June, but often falls short in late-July and August. These two bloat control products give you the opportunity to graze the re-growth on legume hay fields with confidence.

These products only need to be fed when there is a risk of bloat. By starting a couple of days before entering the high legume pasture, you will have the rumen prepared for the alfalfa and the bloat risk will be very manageable.

Grazing legumes has many advantages. Following good management practices and using the bloat preventative products, Bloat Guard or Alfasure, allows you to reap these advantages.

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Why Value Systems are the Solution for the Ontario Beef Industry?

Brian Pogue, Beef Program Lead, OMAF and MRA

Background

Ontario does not produce enough beef to satisfy consumer demand. In 2012 there were 626,598 beef animals harvested in Ontario plants for a total of 522,672,012 lbs on a carcass basis. The population of Ontario in 2012 was 13,445,408 and consumed 814,791,725 lbs of beef on a carcass equivalent.

There is a huge amount of beef imported from the USA, and smaller amounts imported from other countries. Total imported beef into Ontario during 2012 was 401,472,267 lbs with a value of \$1,151,731,371.

There are a significant number of consumers who want to support their "local" farmers and they need to be able to quickly identify "Ontario" beef. In order to increase the consumption of "Ontario" beef, it must be consumer demand that pulls it through. A push by producers will not work unless they can supply a better product at a lower price.

Value Systems Could Satisfy Consumer Needs

The population of Ontario is very diverse, with a large variation amongst groups of consumers. Consumers could be grouped as follows:

- a) Quality conscious consumers who are looking for tenderness and taste where marbling is an important component with a desire for AAA and Prime product.
- b) Health conscious consumers who are seeking lean meat. Tenderness is still a concern but having it lean is the most important attribute for this group.
- c) Attribute-specific consumers who are seeking particular characteristics which can include local, no added hormones, etc. This group is made up of many smaller sub-groups and would overlap with the above two groups.

With consumers having various needs, there would have to be a number of value systems developed to meet the needs that were considered viable. All consumers are price conscious to some degree. There are a significant number of consumers who will pay a premium over commodity beef, if the product fits their needs. In a value system, this premium would be shared amongst the partners involved in the production of the product.

A Value System Provides a Plan for the Industry

From a bird's eye view, the beef industry appears to be disorganized, particularly when compared to other industries such as poultry and pork. Looking down into pastures or into pens of feedlot cattle, there are cattle of all colours and shapes, even in the same field and/or pen. In an attempt to have a degree of uniformity, calves going to auction marts are usually split into relatively small lots.

The power of genetic improvement would be a key component in producing specification beef. A value system would have a production protocol that would include a genetic plan, and those cow herds involved in a value system would abide by the genetic program as part of the protocol for the Ontario branded product. A plan based on a value system would have a much different structure than is currently in place with the beef industry in Ontario.

Complete Traceability

A value system would be based on a complete traceability system that provides for identification of meat back to an individual animal. This traceability system will gain consumer confidence, as DNA could be used to verify that a cut of meat came from a specific animal. This system of verification would be a huge differentiation from commodity beef, or any other beef which makes claims, but is not able to back it up with complete traceability.

Sharing Information

A traceability system provides a network for sharing information with the various components of the value chain. This information would be used to find efficiencies in the value system through improving genetics and refining the protocol. In addition to improving efficiency, the information would also be used to improve the quality of the product, such as tenderness, but most importantly consistency.

Sustainable Production

A value system will result in the production of a consistent product; find efficiencies, and improve the product. The end result is an industry that has some direction and is profitable. This will not only add stability to those participating in the value system but attract new people to participate in the industry.

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Northern Ontario Facts and Figures in Brief

Tom Hamilton, Beef Program Lead-Production Systems, OMAF and MRA

Climate change is having a global impact on agriculture, especially in Northeastern Ontario. What could this mean for the future of this region?

- 2,800 farms which return \$190 million in agricultural farm cash receipt
- 700,000 acres of farmed land.
- It has been estimated that most districts in Northern Ontario can increase active agricultural lands from 20 to 50% by drawing idled private lands back into use.
- The Great Clay Belt (GCB) in Northeastern Ontario consists of 16 million acres of potentially fertile glaciolacustrine soils (Fig 1). This is double the amount of cropland currently being farmed in the province.
- To date only about 2 per cent of this land has been developed for agriculture.
- The GCB also stretches into Northwestern Quebec, which contains another 13 million acres.
- The Canada Land Inventory has identified 4.4 million acres of Ontario's GCB as Class 2, 3 or 4, which are suitable for cultivation. The remainder has either not been classified or is unsuitable for agriculture.
- The main limitations to productivity are drainage and climate. Systematic tile drainage has been shown to address the first limitation, while long-term climate warming and the development of new crop varieties and agronomic techniques have revolutionized the crops which can be grown (Fig. 2)



Figure 1. The Great Clay Belt

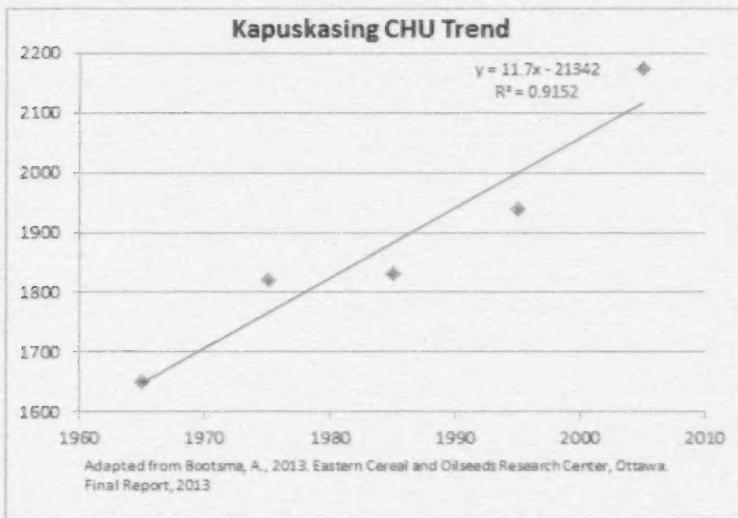


Figure 2. Increasing CHU trend in Kapuskasing

- The warming trend goes back at least 30 years, and is exemplified by the increase in annual crop heat units (CHU) at Earlton from 1800 to 2300 CHU. This has had a major positive impact on crop production. For example, soybeans, corn grain and silage corn are now reliably grown in the Temiskaming region, while canola has supplemented the traditional barley, oat and wheat crops in the Cochrane-Kapuskasing area.

2011 -2012 Crop Yields*

Temiskaming District

- Corn = 130 - 145 bu/ac
- Soybeans = 50 – 60 bu/ac

Cochrane District

- Canola = 1.45 tonnes/ac

- In addition, these regions are well suited to forage production and are capable of supporting large herds of ruminant animals
- Development potential for the GCB in Ontario is shown by the degree to which agriculture in Northwestern Quebec has progressed (Fig. 3)

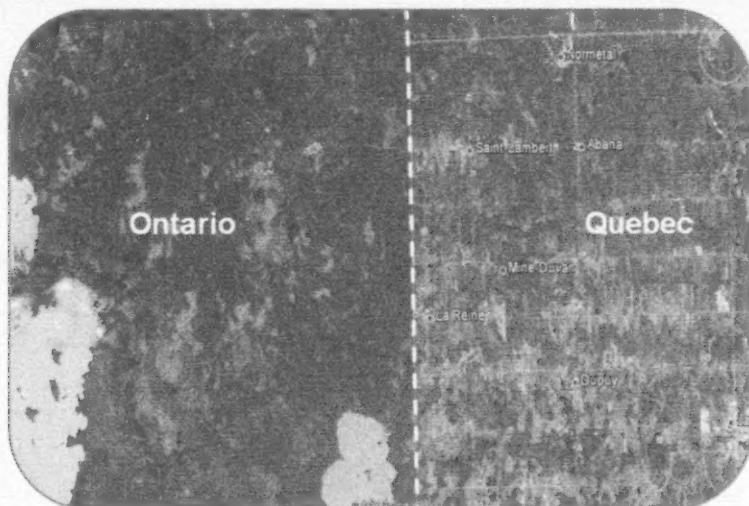


Figure 3. Development differences between Northeastern Ontario

References

2006 Census of Agriculture. Statistics Canada.
Chapman and Brown. The Canada Land Inventory. 1966.
Environment Canada Weather Station, Earlton Airport. Ontario Climate Center, Kapuskasing Data – Environment Canada, 2012. <http://www.climateontario.ca>
2011 Census of Agriculture (Preliminary data). Statistics Canada.

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